

REMARKS

Claims 16-42 are pending in the application. The Examiner has indicated that claims 16-20 are allowable. Claims 21-42 are rejected. Claims 21 and 31 are amended herewith. Support for these amendments can be found for example at page 2, lines 5-8 of the specification. No new matter has been added by this amendment. Please consider the following remarks.

All of the pending claims relate to an aqueous emulsion for coating the internal surface of a food casing. The aqueous emulsion includes a polyglyceryl ester having at least two glyceryl moieties and greater than 50 wt % water.

35 U.S.C. § 102

Claims 21-23, 25-31, and 33-42 are rejected under 35 U.S.C. 102(b) as being anticipated by either Teepak GB 1470726 ("Teepak") or Hammer *et al.*, U.S. Patent No. 5,370,914 ("Hammer"). In both instances, the Examiner asserts that the references teach an aqueous coating composition that includes at least one polyglyceryl ester and greater than 65 weight percent of water.

It is asserted in the Advisory Action that there is a legitimate confusion as to the structure of the claimed polyglyceryl esters due to overlap in nomenclature. This assertion has been met, at least in part, by amending the claims to recite that the polyglyceryl ester have at least two glyceryl moieties.

Applicants assert that the structures referred to in both Teepak and Hammer are distinct from compounds recited in the presently claimed invention. Both Teepak and Hammer disclose fatty acid esters including mono-, di-, and triglycerides. These compounds have a chemical structure that includes a single glycerol moiety where one, two or three of the hydroxyl groups of the glycerol are esterified. One of ordinary skill in the art would understand the compounds disclosed in Teepak and Hammer to be fatty acid esters including a single glyceryl moiety. Applicants have provided evidence for this assertion in the response filed on April 25, 2003. (Biochemistry, Albert L. Lehninger, 2d Edition (1975) at p. 284, attached as Exhibit A). Further evidentiary support for this assertion is found in the references themselves. For example, Teepak discloses the following: "*The mono and diesters of glycerin* are partial esters comprising not

more than 10% triglycerides. The portion of monoester to diester may vary for producing a resultant mixture of mono and diglyceride having the desired capillary melting point range.”  
(Emphasis added.)

While there may be overlap in the nomenclature of glyceryl containing compounds, this is not sufficient to cause confusion between structures in the presently claimed invention and the structures disclosed in Teepak and Hammer. When read in light of the references as a whole and the well known convention of naming fatty acids and partial fatty acids, one of skill in the art would understand that Teepak and Hammer disclose compounds having a single glyceryl moiety. On the other hand, the presently pending claims have been amended to specifically recite a polyglyceryl compound containing at least two glyceryl moieties, thus eliminating any possibility that the claimed compounds could be confused to include compounds having a single glyceryl moiety such as the fatty acid esters disclosed in Teepak and Hammer.

In view of the foregoing, Applicants assert that neither Teepak nor Hammer disclose the compositions recited in the presently pending claims. Accordingly, neither Teepak nor Hammer anticipate the presently pending claims, and Applicants request that the rejection be withdrawn.

35 U.S.C. § 103

Claims 24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer in view of Colliopoulos et al. U.S. Patent 3,966,632 (“Colliopoulos”). Colliopoulos discloses the use of polyglyceryl esters to improve the stability of emulsions of oil. Colliopoulos does not relate to food casing products, but rather relates to a vegetable oil emulsion, suggesting that the emulsion can be used in the food industry, for example in the baking industry as shortening for breads and pastries or for the manufacture of mayonnaise. Colliopoulos does not teach or suggest use of the polyglyceryl esters in food casing products.

It is asserted in the Office Action that it would have been obvious to substitute the compound of Colliopoulos for the fatty acids compounds disclosed in Hammer because Colliopoulos teaches that triglyceroleate is better for preparing a stable emulsion of oil containing more than 10% water. Applicants disagree. As noted in the Office Action of August 28, 2002 (p. 2, section 4), Teepak teaches an aqueous emulsion that has greater than 65% water.

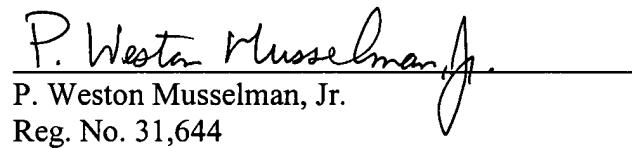
Nowhere does Teepak teach or suggest the use of polyglyceryl esters as emulsifiers for the disclosed aqueous emulsions. Although Teepak does disclose the use of emulsifiers, Teepak teaches away from the polyglyceryl ester compounds disclosed in Hammer. Instead Teepak suggests the use of monofatty acid esters or polyhydric alcohols, such as sorbitol monosetters or alkane diols like 1,2-propane diol. (Teepak, Col. 3, lines 55-64.) Accordingly, one of ordinary skill in the art reading Teepak would not have been motivated to substitute the triglyceryloleate of Colliopoulos to prepare an emulsion, but rather would have been motivated to use one of the compounds actually suggested in Teepak itself. Without a motivation to combine the references, a proper *prima facie* case of obviousness has not been met. Accordingly, Applicants request that the rejection be withdrawn.

Applicants submit the presently pending claims are in condition for allowance, and ask that all claims be allowed.

Enclosed is a check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050, referencing attorney docket number 15836-037001.

Respectfully submitted,

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P. Weston Musselman, Jr.  
Reg. No. 31,644

Fish & Richardson P.C.  
5000 Bank One Center  
1717 Main Street  
Dallas, Texas 75201  
Telephone: (214) 292-4030  
Facsimile: (214) 747-2091